



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/956,971

09/21/2001

Thomas E. Slowe

37112-173581

6865

26694

7590

07/25/2008

VENABLE LLP

P.O. BOX 34385

WASHINGTON, DC 20043-9998

EXAMINER

CZEKAJ, DAVID J

ART UNIT

PAPER NUMBER

2621

MAIL DATE

DELIVERY MODE

07/25/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/956,971	Applicant(s) SLOWE ET AL.	
	Examiner DAVID CZEKAJ	Art Unit 2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 April 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

On pages 12-14, applicant argues that modifying Bergen to include editing would destroy the created relationships and groupings and would render the art unsatisfactory for its intended purpose. While the applicant's points are understood, the examiner respectfully disagrees. See for example Bergen column 14, lines 1-9. There Bergen discloses that a need arises during indexing and retrieval of stored video for video editing and manipulation purposes. Bergen further discloses the use of video editing systems in column 16, lines 30-35. By disclosing the use of Bergen's system with video editing systems, the created relationships would not be destroyed and would not render the art unsatisfactory for its intended use. Therefore the rejection has been maintained.

On page 14, applicant argues that editing is not described in Bergen. While the applicant's points are understood, the examiner respectfully disagrees. See for example Bergen column 14, lines 1-9. Further, Maeda, not Bergen, was relied upon to disclose the specifics of the editing processing of the claimed invention. Therefore the rejection has been maintained.

On page 14, applicant argues that it would not have been obvious to combine Bergen with Maeda. While the applicant's points are understood, the examiner respectfully disagrees. The examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one

Art Unit: 2621

of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Bergen discloses in column 14, lines 1-9, the use of Bergen's system with video editing systems. Maeda teaches in column 4, lines 11-17, that prior art processing systems have difficulty processing a plurality of objects. Hence, Maeda discloses a video editing system aimed at reducing these difficulties. Therefore the combination of Bergen with Maeda is deemed proper. Therefore the rejection has been maintained.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 26 is rejected under 35 U.S.C. 101 because the specification on page 6, paragraph 21, indicates the computer readable medium can comprise a carrier wave which is directed towards non-statutory subject matter. The examiner recommends removing carrier wave from the specification.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-2, 22, 25-27, and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bergen et al. (6956573), (hereinafter referred to as “Bergen”) in view of Maeda (6625316).

Regarding claims 1, 25-27, and 29, Bergen discloses an apparatus that relates to video processing techniques (Bergen: column 1, lines 5-10). This apparatus comprises “decomposing the original sequence to obtain a decomposed original sequence comprising an original camera motion layer, the layer comprised of a composite representation of background data from a plurality of frames in the original video sequence (Bergen: figure 7; column 13, lines 25-45, wherein the original camera motion layer is the background generated from the plurality of frames) and “zero or more original fixed-frame layers, each fixed frame layer being a layer comprised of independent representations of foreground data” (Bergen: figure 7; column 13, lines 25-32, wherein the fixed frame layers is the foreground image of the boat). However, Bergen fails to disclose the editing as claimed. Maeda teaches that prior art processing systems have difficulty processing a plurality of objects (Maeda: column 4, lines 11-17). To help alleviate this problem, Maeda discloses “editing a camera motion layer to obtain a modified camera motion layer” (Maeda: column 13, lines 15-25). Since the editing taught by Maeda would be applied to camera motion layers of Bergen, the editing would be performed without editing any frames of the original sequence. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to take the

apparatus disclosed by Bergen and add the editing taught by Maeda in order to obtain an apparatus that more easily processes a plurality of objects.

Regarding claims 2 and 22, Bergen in view of Maeda disclose “converting one of the original camera motion layers to an original image” (Bergen: figure 7; Maeda: column 13, lines 15-28, wherein the converting is the decoding to obtain an image), “editing to obtain a modified image” (Maeda: column 13, lines 15-28, wherein the editing is the process of modifying the input), and “converting the modified image to one of the modified camera motion layers” (Bergen: figure 7; Maeda: column 14, lines 38-40, wherein the modified image is converted or synthesized with the rest of the layers).

2. Claims 3-5 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable Bergen et al. (6956573), (hereinafter referred to as “Bergen”) in view of Maeda (6625316) in further view of Jasinski et al. (6504569), (hereinafter referred to as “Jasinski”).

Regarding claims 3 and 23, note the examiners rejection for claim 1, and in addition, claims 3 and 23 differ from claim 1 in that claims 3 and 23 further require rectifying the original and modified image prior to editing and converting the image. Jasinski teaches that it is well known in the art to rectify an image before manipulating the object (Jasinski: column 1, lines 20-31, wherein the rectifying is projecting the images on different planes). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to implement the image rectifying taught by Jasinski in order to obtain an

apparatus that edits an object correctly by first placing the object in the correct perspective.

Regarding claims 4 and 5, Maeda discloses “inserting, deleting, or changing a portion to obtain modified camera motion layers” (Maeda: column 13, lines 15-28, wherein the changing is the enlargement or reduction which then replaces the camera motion layer).

3. Claims 6, 13, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bergen et al. (6956573), (hereinafter referred to as “Bergen”) in view of Maeda (6625316) in further view of Foreman et al. (6628303), (hereinafter referred to as “Foreman”).

Regarding claims 6 and 15, note the examiners rejection for claim 1, and in addition, claims 6 and 15 differ from claim 1 in that claims 6 and 15 further require adding a video sequence to the original camera motion layers. Foreman teaches that prior art video processing systems are very complex utilizing multiple windows for controlling parameters of video (Foreman: column 1, lines 39-41). To help alleviate this problem, Foreman discloses a single interface wherein a user can “add a video sequence to one of the original camera motion layers” (Foreman: figure 8, column 9, lines 61-62, wherein the video sequence is the shots). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to implement the editing system taught by Foreman in order to obtain an apparatus that is easy to use by all users.

Regarding claim 13, Foreman discloses “modifying an order of one of the original camera motion layers” (Foreman: figure 8, column 9, lines 61-67, wherein modifying the order is modifying the order in which the video is inserted).

4. Claims 7-12, 14, 16-21, 24, 28, and 30-33 are rejected under 35 U.S.C. 103(a) as being unpatentable Bergen et al. (6956573), (hereinafter referred to as “Bergen”) in view of Maeda (6625316) in further view of Petelycky et al. (6204840), (hereinafter referred to as “Petelycky”).

Regarding claim 7, note the examiners rejection for claim 1, and in addition, claim 7 differs from claim 1 in that claim 7 further requires adding an animation sequence to one of the original camera motion layers. Petelycky teaches that prior art video editing systems are difficult to learn and use (Petelycky: column 1, lines 39-44). To help alleviate this problem, Petelycky discloses an apparatus that provides an interface that allows the user to “add animation sequences to one of the original camera motion layers” (Petelycky: figure 3E, column 15, lines 1-28). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to implement the editing system taught by Petelycky in order to obtain an apparatus that is easy to learn and use.

Regarding claims 8-9, although not disclosed, it would have been obvious to add a 3-D object or user-activated region to one of the camera motion layers (Official Notice). Doing so would have been obvious in order to make the video more appealing to the user.

Regarding claim 10, Petelycky discloses “modifying an on/off time of one of the original camera motion layers” (Petelycky: figure 3B, wherein the on/off time is modified by use of the sliders).

Regarding claim 11, Petelycky discloses “modifying an opaqueness of one of the original camera motion layers” (Petelycky: figure 3E, wherein the opaqueness is modified using the transparent slider).

Regarding claim 12, Petelycky discloses “modifying fade-in/fade-out of one of the original camera motion layers” (Petelycky: figure 3F, items 364-365).

Regarding claim 14, Petelycky discloses “deleting one of the original camera motion layers” (Petelycky: column 11, lines 53-54).

Regarding claim 16, Petelycky discloses “modifying a size of one of the original camera motion layers” (Petelycky: figure 3E, wherein the size is modified by the size slider).

Regarding claims 17-19 and 24, Bergen in view of Maeda disclose “editing camera motion parameters of one of the original camera motion layers” (Bergen: figure 7; Maeda: column 13, lines 15-25, wherein the camera motion parameters are described by the affine transformation, which is based on analytical calculations for both the foreground and background objects).

Regarding claim 20, Bergen in view of Maeda disclose “replacing the camera motion parameters with camera motion parameters from another video sequence” (Bergen: figure 7; Maeda: column 13, lines 15-25, column 14, lines 38-44, wherein replacing is the synthesizing different objects from different

source layers which all have different camera motion parameters or affine transformations).

Regarding claims 21 and 28, Maeda discloses “editing at least one of the fixed-frame layers” (Maeda: figure 15, wherein the cattle is the fixed frame layer or foreground object).

Regarding claim 30, note the examiners rejection for claims 1 and 17.

Regarding claims 31-32, although not disclosed, it would have been obvious to specify a coordinate transformation between image planes (Official Notice). Doing so would have been obvious in order to correctly display the images to a user.

Regarding claim 33, although not disclosed, it would have been obvious for the movement to include panning (Official Notice). Doing so would have been obvious in order to better view a scene by being able to control camera movements.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DAVID CZEKAJ whose telephone number is (571)272-7327. The examiner can normally be reached on Mon-Thurs and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Mehrdad Dastouri can be reached on (571) 272-7418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2621

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Dave Czekaj/
Primary Examiner, Art Unit 2621